December 2019

Updated Inventory of Programs for the Prevention and Treatment of Youth Cannabis Use

Revised January 8, 2020 for technical corrections

Program/intervention	Level of evidence	Effective for cannabis	Benefit-cost percentage	Reason program does not meet suggested evidence-based criteria	Percent youth of color
Prevention					
Alcohol Literacy Challenge (for college students)	◉		50%	Benefit-cost/heterogeneity	24%
Alcohol Literacy Challenge (for high school students)	P		58%	Single evaluation	33%
Athletes Training and Learning to Avoid Steroids (ATLAS)	Null			Weight of the evidence	22%
Brief intervention for youth in medical settings	◉		46%	Benefit-cost	65%
Caring School Community (formerly Child Development Project)	Null		60%	Weight of the evidence	47%
Communities That Care	●		86%		36%
Compliance checks for alcohol	◉			Heterogeneity	25%
Compliance checks for tobacco	◉			Heterogeneity	28%
Coping Power Program	◉		58%	Benefit-cost	75%
Curriculum-Based Support Groups (CBSG)	P			Weight of the evidence	90%
Familias Unidas	◉		67%	Benefit-cost	100%
Family Matters	◉		73%	Benefit-cost/heterogeneity	22%
Guiding Good Choices (formerly Preparing for the Drug Free Years)	◉		51%	Single evaluation	1%
InShape	◉		50%	Single evaluation	28%
keepin' it REAL	Null		62%	Weight of the evidence	83%
LifeSkills Training	◉		62%	Benefit-cost	38%
Lions Quest Skills for Adolescence	◉	✓	70%	Benefit-cost	74%
Marijuana Education Initiative Impact Awareness curriculum	P		50%	Single evaluation	88%
Mentoring: Big Brothers Big Sisters Community-Based (taxpayer costs only)	◉		41%	Benefit-cost	57%
Mentoring: Community-based (taxpayer costs only)	◉		66%	Benefit-cost	85%
Multicomponent environmental interventions to prevent youth alcohol use	◉		29%	Benefit-cost/heterogeneity	19%
Multicomponent environmental interventions to prevent youth tobacco use	◉		82%	Heterogeneity	21%
Positive Action	●	✓	94%		57%
Positive Family Support/Family Check-Up	◉	✓	70%	Benefit-cost	40%
Project ALERT	Null		42%	Weight of the evidence	28%

● Evidence-based ◉ Research-based **P** Promising **Null** Null outcomes See definitions and notes on page 3.

Notes:

✓ At least one cannabis outcome with a meta-analytic effect size estimate demonstrating reduced cannabis use with a p-value < 0.20.

Many interventions produce effects on more than one type of outcome. This is especially true for prevention programs which often target multiple issues. WSIPP analyzes all relevant outcomes, and the evidence rating and benefit-cost results for a given program are often based on a variety of different outcomes, such as school achievement, substance use, mental health, and crime. In the column to the right of the level of evidence, we denote with a check mark those programs that have evidence of effectiveness for cannabis use specifically ($p < 0.20$). In addition to the overall level of evidence for a program, it is important to consider the specific outcomes the program has achieved to determine suitability for a given application. Each program name in the table links to a results page where a table, "Meta-Analysis of Program Effects," lists all of the outcomes analyzed for each program.

Program/intervention	Level of evidence	Effective for cannabis	Benefit-cost percentage	Reason program does not meet suggested evidence-based criteria	Percent youth of color
Prevention (continued)					
Project Northland	◉		53%	Benefit-cost	55%
Project SHOUT (Students Helping Others Understand Tobacco)	Null			Weight of the evidence	43%
Project STAR (Students Taught Awareness and Resistance; also known as the Midwestern Prevention Project)	◉	✓	70%	Benefit-cost/heterogeneity	21%
Project SUCCESS	Null		38%	Weight of the evidence	37%
Project Towards No Drug Abuse	◉		54%	Benefit-cost	70%
Project Towards No Tobacco Use	●		78%		40%
PROSPER (PROmoting School-community-university Partnerships to Enhance Resilience)	◉	✓	57%	Benefit-cost/heterogeneity	15%
Protecting You/Protecting Me	P			Weight of the evidence	92%
Raising Healthy Children	Null			Weight of the evidence	18%
SPORT	◉		51%	Benefit-cost	49%
STARS (Start Taking Alcohol Risks Seriously) for Families	P			Single evaluation	66%
Strengthening Families for Parents and Youth 10-14	Null		61%	Weight of the evidence	19%
Strong African American Families	◉		55%	Benefit-cost	100%
Strong African American Families—Teen	◉		57%	Benefit-cost	100%
Teen Intervene	◉	✓	60%	Benefit-cost/heterogeneity	29%
Treatment					
Adolescent Assertive Continuing Care (ACC)	◉	✓	39%	Benefit-cost/heterogeneity	27%
Adolescent Community Reinforcement Approach (A-CRA)	◉			Single evaluation	59%
Functional Family Therapy (FFT) for adolescents with substance use disorder	◉		35%	Benefit-cost	74%
Multidimensional Family Therapy (MDFT)	◉	✓	28%	Benefit-cost	87%
Multidimensional Treatment Foster Care (MTFC) (vs. group homes) for court-involved youth	◉		91%	Heterogeneity	23%
Multisystemic Therapy-Substance Abuse (MST-SA) for court-involved youth	◉	✓	58%	Benefit-cost	65%
Teen Marijuana Check-Up (TMCU)	◉	✓	49%	Benefit-cost	35%

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Definitions and Notes:

Level of Evidence:

Evidence-based: A program or practice that has been tested in heterogeneous or intended populations with multiple randomized and/or statistically-controlled evaluations, or one large multiple-site randomized and/or statistically-controlled evaluation, where the weight of the evidence from a systematic review demonstrates sustained improvements in at least one of the following outcomes: child abuse, neglect, or the need for out of home placement; crime; children's mental health; education; or employment. Further, "evidence-based" means a program or practice that can be implemented with a set of procedures to allow successful replication in Washington and, when possible, has been determined to be cost-beneficial.

Research-based: A program or practice that has been tested with a single randomized and/or statistically-controlled evaluation demonstrating sustained desirable outcomes; or where the weight of the evidence from a systematic review supports sustained outcomes as identified in the term "evidence-based" in RCW (the above definition) but does not meet the full criteria for "evidence-based."

Promising practice: A program or practice that, based on statistical analyses or a well-established theory of change, shows potential for meeting the "evidence-based" or "research-based" criteria, which could include the use of a program that is evidence-based for outcomes other than the alternative use.

Null outcome(s): If results from multiple evaluations or one large multiple-site evaluation indicate that a program has no significant effect on outcomes of interest ($p > 0.20$), a program is classified as producing "null outcomes."

Poor outcome(s): If results from multiple evaluations or one large multiple-site evaluation indicate that a program produces undesirable effects ($p < 0.20$), a program is classified as producing "poor outcomes."

Reason the Program May Not Meet Evidence-Based Criteria:

Benefit-cost: The proposed definition of evidence-based practices requires that, when possible, a benefit-cost analysis be conducted. We use WSIPP's benefit-cost model to determine whether a program meets this criterion. Programs that do not have at least a 75% chance of a positive net present value do not meet the benefit-cost test. The WSIPP model uses Monte Carlo simulation to test the probability that benefits exceed costs. The 75% standard was deemed an appropriate measure of risk aversion.

Heterogeneity: To be designated as evidence-based under current law or the proposed definition, a program must have been tested on a "heterogeneous" population. We operationalized heterogeneity in two ways. First, the proportion of program participants who are children/youth of color must be greater than or equal to the proportion of children/youth of color aged 0 to 17 in Washington State. From the 2010 Census, for children aged 0 through 17 in Washington, 68% were white and 32% were children/youth of color. Thus, if the weighted average of program participants had at least 32% children/youth of color then the program was considered to have been tested on a heterogeneous population.

Second, the heterogeneity criterion can also be achieved if at least one of the studies has been conducted on youth in Washington and a subgroup analysis demonstrates the program is effective for children/youth of color ($p < 0.20$). Programs passing the second test are marked with a ^.

Mixed results: If findings are mixed from different measures (e.g., undesirable outcomes for behavior measures and desirable outcomes for test scores), the program does not meet evidence-based criteria.

No rigorous evaluation measuring outcome of interest: The program has not yet been tested with a rigorous outcome evaluation.

Single evaluation: The program does not meet the minimum standard of multiple evaluations or one large multiple-site evaluation contained in the current or proposed definitions.

Weight of evidence: Results from a random-effects meta-analysis ($p > 0.20$) indicate that the weight of the evidence does not support desired outcomes, or results from a single large study indicate the program is not effective.

Other Definition:

Benefit-cost percentage: Benefit-cost estimation is repeated many times to account for uncertainty in the model. This represents the percentage of repetitions producing overall benefits that exceed costs. Programs with a benefit-cost percentage of at least 75% are considered to meet the "cost-beneficial" criterion in the "evidence-based" definition above.

For questions about the inventory, contact Eva Westley at eva.westley@wsipp.wa.gov.